



Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Required Report - public distribution

Date: 5/29/2003

GAIN Report #BM3015

Burma

Solid Wood Products

Annual

2003

Approved by:

**Russ Nicely, Acting Agricultural Counselor
U.S. Embassy, Bangkok, Thailand**

Prepared by:

**Daphne Khin Swe Swe Aye, Agricultural Specialist
U.S. Embassy, Rangoon, Burma**

Report Highlights:

Burma continues to provide sizeable wood exports, with teak remaining the most important single wood species. Other tropical hardwoods make up the balance of wood exports. Most exports are of logs, as processing facilities remain underdeveloped. Annual production of teak in 2002/03 should be about 600,000 cubic meters, with another 1.8 million cubic meters of tropical hardwoods produced.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
Annual Report
Bangkok [TH1], BM

Executive Summary	1
Production	2
Forest Area.....	2
Strategic Indicator Table.....	2
Forest Cover Change.....	3
Reserved Forest Area.....	3
Planted Forests	4
Special Teak Plantations.....	4
Watershed Management.....	5
Environmental Management	5
Reforestation in Border Areas	5
Forest Plantations	6
Yearly Production of Teak Logs	7
PSD Tables	8
Consumption	10
Annual Allowable Cut	10
Extraction	10
Domestic Marketing and Milling	11
Domestic Consumption	11
Trade	12
Export Marketing and Milling	12
Marketing	12
Exports	12
Export Trade Matrix Teak Logs	13
Export Trade Matrix Tropical Hardwood Logs	13
Exports of Plywood and Veneer	14
Tenders	14
Average Export Prices	14
Teak Log Prices	14
Teak Lumber Prices	15
Hardwood Log Prices	15
Hardwood Lumber	16
Teak Logs - Veneer and Sawing Quality	16
Monthly Exports of Teak in 2000	17
Monthly Exports of Hardwood in 2000	18
Monthly Exports of Teak in 2001	18
Monthly Exports of Hardwood in 2001	19
Monthly Exports of Teak in 2002	19
Monthly Exports of Hardwood in 2002	20
Teak Log Average Price in Tender Sales	21
Teak Log Tender Sales, by Area	22
Trade Matrix by Month	24
Exports of Forest Products in 2001	25

Executive Summary

Burma remains about 50 percent forested and has sizeable stands of commercial hard woods due to a sound policy of sustainable forest management that has been in place since British times. The Myanmar Timber Enterprise claimed that based on sustainable yield forest management, more than 36.66 million Hoppus tons (66 million cubic meters) of teak have been extracted over a period of 132 years and yet the reserved teak forests are still intact to this day.

Nevertheless, forest cover has declined from about 57 percent in 1985 to 50.8 percent in 1996. In 1985, the forest area per capita was about 1.068 hectares (2.638 acres) while in 1996 (most recent data) it was about 0.754 hectares (1.864 acres). Even though the commercial extraction of teak and tropical hardwoods is controlled under the Forest Department (FD) regulations and monitoring, population growth and the resulting demand for fuel wood and agricultural land are putting pressure on both the hardwood and other forested areas. Illegal logging of hardwoods remains and continues to be a problem in border areas, but the largest threat to Burma's forest resources is encroachment by villagers seeking wood for fuel and land for crops.

Accurate and reliable statistics on forest area resources, production, consumption, and trade are difficult to obtain given the extent of illicit trade and insufficient government resources to adequately monitor the sector. Please note that this report only includes the Strategic Indicator table for Forest Area. Nevertheless, Post forecasts that annual production (based on Burma's fiscal year of April/March) of teak logs in 2002/03 will continue to be around 600,000 cubic meters. Production of other hardwood logs will be approximately 1,800,000 cubic meters. Lumber output over the same period will be about 41,000 cubic meters of teak and 280,000 cubic meters of other hardwoods.

Burma's export trade is still dominated by logs. Exports of teak logs in calendar year 2003 will be about 300,000 cubic meters, while exports of other hardwood logs will likely be about 500,000 cubic meters. Exports of teak lumber will be about 26,000 cubic meters. Exports of teak and teak lumber are monopolized by the Myanmar Timber Enterprise (MTE), an agency under the Ministry of Forestry, which handles teak exports. The private sector is mostly involved in exporting value added products such as furniture, plywood, etc. Production of lumber and other value-added products for domestic use or for export is hampered by the low level of the local processing sector.

Commercial extraction of tropical hardwoods, both officially and outside the system, are extremely profitable and an important earner of foreign exchange. It is unlikely that the existing regulations, sound as they might be, can be completely effective in curbing illicit extraction. At the village level, the short-term economic benefits of gathering fuel wood or clearing land for crops simply overrule the longer-term benefits of reforestation or other environment-friendly land management techniques.

Production

Forest Area

Burma is a timber surplus country surrounded by timber deficit countries, such as Thailand, the People's Republic of China, India, and Bangladesh. The latest data released by the Forest Department in 2003, has total forest cover area at 472,940 square kilometers. Out of a total land area of 676,577 square kilometers, 413,674 square kilometers is within the watershed area of Ayeyarwady River, the largest watercourse in the country. The forest flora of Burma ranges from sub alpine forests in the north through thorn forests in central Burma to tropical rain forests in the south.

STRATEGIC INDICATOR TABLE: FOREST AREA (000 ha/000 cum)			
Country:	Previous	Current	Following
Report Year:	Calendar Year	Calendar Year	Calendar Year
Total Land Area	261,228	261,228	261,228
Total Forest Area	472,940	472,940	472,940
--of which, Commercial	434	434	434
----of commercial, tropical hardwood			
----of commercial, temperate hardwood			
----of commercial, softwood			
Forest Type			
--of which, virgin	472,940	472,940	472,940
--of which, plantation	736	777	818
--of which, other commercial (regrowth) ('000 hectares)			
Forest Ownership			
--Nationally owned and no commercial access			
--Nationally owned, commercial logging permitted	yes	yes	yes
--Other publically owned land, no commercial access			
--Other publically owned land, logging permitted			
--privately owned commercial forest			
Total Volume of Standing Timber (thousand cubic meters)			
--of which, Commercial Timber ('000 cum)			
Annual Timber Removal ('000 cum) 1/			
Annual Timber Growth Rate ('000 cum)			
Annual Allowable Cut *	1,872	1,872	1,872
* = of which 269,000 cubic meters is teak, for each year			

Forest Cover Change

An assessment of the change in forest cover conducted in 1990 revealed that the actual forested area had decreased at an average annual rate of 220,000 hectares during a period of 14 years from 1975 to 1989. The annual deforestation rate of 0.68 percent of the total area of natural forest as indicated by the 1975 to 1989 data is alarmingly high.

However, the physical transfer of forest land into non-forest uses in the same period was only about 15,000 hectares, according to the Forest Department. Shifting cultivation, agricultural encroachment and illicit cutting had been primarily responsible for the deforestation. Since there was no survey on forest cover since 1999, Post speculates that the rate of forest cover decline accelerated after 1990, since some of the forest area was used by the Ministry of Agriculture and Irrigation to increase the production of export potential crops such as rice and sugarcane, and for the building of numerous dams to enhance agricultural production. With the national drive to increase the rice acreage to 18 million acres in the near future, some of the encroached forest areas and paddy areas in the reserved forest areas are now included in the rice acreage statistic, further decreasing the forest cover area to 472,940 acres from 498,621 acres. In addition, it is widely believed that logging in the border areas has been on the increase since the early 1990's.

Reserved Forest Area

According to the FD, Reserved Forests, Protected Public Forests and Protected Areas System are legally constituted as Permanent Forest Estate (PFE) covering 17.2 million hectares, some 25.39 percent of the total land area. The 1995 Myanmar Forest Policy stipulates 35 percent of total land area of the country stay under permanent forest. Of the country's total of 261,228 square miles, in 2000/01 there was an increase of 11 percent in the Reserved Forest Area as compared to 1998/99. The most notable increases in Reserved Forest Area by States and Division wise was an increase of 111 percent in Kayah State, 73 percent in Rakhine State, 34 percent in Shan State and 25 percent in Kayin State.

Year	Total Land Area (sq.miles)	Total Forest Area	Reserved Forest area	Unclassified Forest area	Other Land Area
1990/91	261,228	132,910	39,160	93,750	128,318
1995/96	261,228	132,686	39,848	92,838	128,542
1998/99	261,228	132,650	44,859	87,791	128,578
1999/00	261,228	132,650	48,612	84,036	128,578
2000/01*	261,228	132,650	49,979	82,671	128,578

Source: Statistical Year Book 2001

* = provisional actual

Planted Forests

Burma initiated plantation forestry as early as 1856 when teak plantations in small scale were established by the Taungya method and reached a total of 47,167 hectares at the end of 1941. Large scale plantation forestry was launched in 1980 and more than 30,000 hectares of forest plantations have been formed annually since 1984. As it was clearly stated in the Myanmar Forest Policy of 1995, forest plantations will not be substituted for existing natural forest, but used only to supplement natural forest management. Four different types of forest plantations are established throughout the country: Commercial, Village Wood Supply, Industrial, and Watershed.

Forest Plantations by types for 2002

Type of Plantation	Area (hectares)	% of Total Area
Commercial	433,871	54
Village Wood Supply	205,972	26
Industrial	63,236	8
Watershed	95,000	12
Total	798,079	100

Forest Plantations by Species at the end of 2001

Species	Area (hectares)	% of Total Area
Teak (<i>Tectonan grandis</i>)	306,942	42
Pyinkado(<i>Xylia dolarbriformis</i>)	55,709	8
Padauk (<i>Pterocarpus macrocarpus</i>)	16,027	2
Pine (pinus species)	18,070	2
Euclayptus(<i>Eucalyptus</i> species)	75,030	10
Other	264,405	36
Total	736,184	100

Special Teak Plantations

The Special Teak Plantation Program, structured with a series of 8 consecutive phases, has been implemented since 1998. Each phase, with a duration of 5 years, accommodates 20 plantation centers. Each center is to establish 405 hectares of teak plantations annually, and a total of 40,500 hectares is to be planted at 20 plantations centers during the first phase. The Special Teak Plantation program should establish 324,000 hectares of teak plantations by the end of the standard 40 year rotations. Harvesting will be a clear cut at the end of the rotation. A sustainable production of 1.8

millions cubic meters of teak is estimated to be annually available from 8,100 hectares of these plantations.

Watershed Management

Watershed areas suffering different degrees of degradation are fairly wide spread due to both natural causes and manmade ones. The total watershed area in Burma is estimated to be about 6,556,000 hectares. Reforestation by plantation establishment is practiced as an urgent measure to rehabilitate degraded watersheds. Since 1981 Burma has established watershed plantations and by the end of 2002, watershed plantations constituted about 12 percent of the country's total planted area. FD, in order to prevent further degradation, established 72,733 hectares of watershed plantations to rehabilitate 102 critical watersheds for the existing new dams and reservoirs. FD has a target of planting 203,970 acres of watershed plantations in a 30-year plan, ending in 2030. The Dry Zone Greening Department will also carry out plantings for 155,870 acres within the same period. The 1992 enacted Forest Law provides the mechanism for declaring certain lands under protected status as "Watershed Reserved Forest" and protection of public forest for protection of water resources and soil.

Environmental Management

The dry zone of central Burma covers an area of about 8.72 million hectares in 57 townships and since 1960 every possible measure to prevent and arrest environmental degradation was hampered by an unfavorable climate and population pressure. The foremost fuel wood deficit areas are located in the central dry zone, where people spend much of their days collecting fuel wood. The Dry Zone Greening Department (DZDG) was instituted in 1997, as a new department to enhance greening and rehabilitation activities for improved social and environmental stability in the entire Dry Zone. The total area under the charge of the DZDG is about 21,557,459 acres, constituting of 3,777,479 acres of reserved forest, 8,101,569 acres of unclassified forest and 9,678,411 acres of agricultural land. Annual works already under implementation are:

- Establishment of forest plantations for an area of over 14,000 hectares,
- protection and management of about 40,500 hectares of degraded natural forests,
- natural regeneration over an area of more than 40,000 hectares in degraded natural forests,
- distribution of 53,000 efficient cooking stoves and 5.3 million briquettes,
- construction of 170 small ponds and 5 artisan wells,
- greening and rehabilitating 15 degraded mountains, and
- special greening programs in two townships.

From 1997/98 to 2002-03, the DZDG was able to:

- protect establish 22,979 acres(hectares) of forest plantations,
- distribute 806,931 acres (hectares) of degraded natural forest,
- distribute 30,474 numbers of efficient cooking stoves and 51 million briquettes, 0.14 million tons of agricultural waste,
- construct 895 ponds,48 tube wells and 725 small dams for provision of water.

Reforestation in Border Areas

Burma's border areas are mostly rugged and mountainous, particularly in the north and east, where national ethnic groups reside. FD has formed over 2,600 hectares of forest plantations for both local supply and catchment protection

and more than 1.52 million seedlings have been distributed free of charge in the border areas between 1988-89.

Forest Plantations and distribution of Seedlings at the Border Areas 2000/01

States/Divisions	Type of Plantation (acres)		Seedlings (#)
	Village	Commercial	
Northern Shan State	230	98	96,230
Kachin State	150	15	53,000
Sagaing Division	-	65	25,000
Kayah State	125	5	3,000
Tanintharyi Division	5	5	40,000
Mon State	-	-	15,000
Rakine State	10	30	11,000
Palaung Region	50	20	3,150
Total	570	373	211,380

Forest Plantations and distribution of Seedlings at the Border Areas 2001/02

States/Divisions	Types of Plantation (Acres)		Seedlings (#)
	Village	Commercial	
Chin State		-	5,000
Kayah State	125	10	15,000
Kayin State	-	5	10,000
Kachin State	150	150	40,000
Sagaing Division	-	105	14,500
Tanintharyi Division	5	5	40,000
Mon State	-	-	15,000
Rakhine State	30	20	11,000
Ko Khant Region	110	110	35,000
Wa Region	120	120	48,410

Eastern Shan State	390	185	93,050
Palaung Region	150	20	3,050
Pao	50	20	15,000
Padaung	75	25	25,000
Total	1,180	605	384,600

Forest Plantations and distribution of Seedlings at the Border Areas 2002/03

States/Divisions	Types of Plantation (Acres)		Seedlings (#)
	Village	Commercial	
Chin State	10	50	5,000
Kayah State	3	30	30,000
Kayin State	10	5	10,000
Sagaing Division	-	105	43,000
Tanintharyi Division	5	5	40,000
Mon State	-	-	15,000
Rakhine State	30	20	11,000
Northern Shan State	120	120	26,410
Eastern Shan State	577	180	94,890
Total	905	665	335,300

Yearly Production of Teak Logs from 1990-91 to 2000-01 (tons)

Year	1 st & 2 nd	3 rd quality	4 th quality	SG 1	SG 2	SG 3	SG 4	Assorted	Total
1990-91	86	1,185	5,371	24,731	30,049	17,609	36,481	-	115,512
1991-92	7	184	2,601	8,211	20,833	3,582	32,049	-	67,467
1992-93	11	239	3,252	8,318	24,708	5,670	93,038		135,236
1993-94	1	183	2,589	10,880	27,792	4,091	66,793		112,329
1994-95	9	353	2,521	20,126	29,606	5,923	74,561		133,099
1995-96		127	1,806	11,964	27,457	3,894	84,766		130,014
1996-97	2	78	1,197	5,601	14,930	3,278	90,437	7,555	123,078

1997-98		40	1,018	4,095	12,558	2,682	65,039	10,267	95,699
1998-99			843	1,765	9,156	971	54,325	96,882	163,942
1999-00		13	542	1,290	4,821	1,108	39,878	131,130	178,782
2000-01	2	20	426	765	4,197	2,592	27,898	49,003	84,903

The market demand for teak logs during the last forty years has been for Veneer production. As the value of teak is so high in the market, teak logs are sliced into veneers as thin as paper and used as teak overlay upon the cheaper species of timber. According to demand, green teak is also exported for the purpose of veneer production. Teak logs available from such popular areas in central Burma as Pakokku, Yaw, Gangaw, Taungdwingyi, Pyay, Thayet, Pyinmanar are for the production of high quality veneers. The buyers prefer not only green teak from these areas but also dry teak as well since these areas produced the best quality teak with less typical defects and a good (bright and yellow) color. Studies have indicated that there is a wide variation in the characteristics of teak in relation to its locality. It is known that weather and soil have great impact on the growth and vitality of teak.

PSD TABLES

PSD Table							
Country: Burma							
Commodity: Teak Logs	(000 CUBIC METERS)						
		2000/01		2001/02		2002/03	
		Old	New	Old	New	Old	New
		2001	Revised	2002	Estimate	2003 Forecast	
Market year begin							
Production		647	622	507	614	584	789
Imports		0	0	0	0	0	0
TOTAL SUPPLY		647	622	507	614	584	789
Exports		385	367	160	303	160	300
Domestic Con.		262	255	347	311	424	489
TOTAL DISTRIBUTION		647	622	507	614	584	789

PSD Table						
Country	Burma					
Commodity	Tropical Hardwood Logs				1000 CUBIC METERS	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2001		01/2002		01/2003
Production	1550	1711	1346	2263	1414	2213
Imports	0	0	0	0	0	0
TOTAL SUPPLY	1550	1711	1346	2263	1414	2213
Exports	600	593	378	574	378	546
Domestic Consumption	950	1118	968	1689	1036	1667
TOTAL DISTRIBUTION	1550	1711	1346	2263	1414	2213

PSD Table						
Country: Burma						
Commodity: Teak Lumber (000 CUBIC METERS)						
	2000/01		2001/02		2002/03	
	Old	New	Old	New	Old	New
Market year begin	2001	Revised	2002	Estimate	2003 Forecast	
Production	46	43	48	58	55	59
Imports	0	0	0	0	0	0
TOTAL SUPPLY	46	43	48	58	55	59
Exports	16	20	28	30	30	26
Domestic Con.	30	23	20	28	25	33
TOTAL DISTRIBUTION	46	43	48	58	55	59

PSD Table						
Country	Burma					
Commodity	Tropical Hardwood Lumber				1000 CUBIC METERS	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2001		01/2001		01/2001
Production	248	263	347	323	349	332
Imports	0	0	0	0	0	0
TOTAL SUPPLY	248	263	347	323	349	332
Exports	1	0	1	0	0	1
Domestic Consumption	247	263	346	323	349	331
TOTAL DISTRIBUTION	248	263	347	323	349	332

Consumption

Annual Allowable Cut (ACC)

The Forest Resources Management system in Burma started by the British in 1856 is still in operation. It is an exploitation-cum-cultural system known as the Myanmar Selection System (MSS) and adopts a felling cycle of 30 years. Teak is generally girdled and then felled 3 years later. All other hardwoods are extracted without girdling. According to the Forest Department, the ACC for teak has been fixed at 609,500 cubic meters before 1996. Nevertheless, since then the ACC for teak was reduced to 269,000 cubic meters (190,000 cubic tons), a decrease of 56 percent compared to the pre-1996 level. The ACC for other hardwoods remains at 1,603,000 cubic meters.

Extraction

Harvesting of timber, milling and trade in forestry products is mainly done by MTE. The Extraction Department under MTE is responsible for harvesting and transportation of teak and non-teak hardwood logs from the forests to various delivery points. The Extraction Department annually extracts roughly about 400,000 cubic meters of teak and about 1.4 million of cubic meters of non-teak hardwoods.

Domestic Marketing and Milling

The domestic marketing and milling are done by the local marketing and milling department of MTE, which process the logs into lumber for distribution in the domestic market. The annual distribution in the domestic market is on the average of about 300,000 cubic meters from MTE and 27,000 cubic meters of hardwood lumber from the private sector.

Domestic Consumption

MTE has the monopoly on the commercial exploitation of teak wood, from extraction to processing and marketing in all forms. For non-teak woods, established private timber businessmen are granted a license to extract under contract. In the milling and processing of hard woods, local saw mills are issued permits for operating the mills on yearly basis.

Non-teak hard woods are produced both by the State and private sector, with the latter having the bigger share. The private sector is allowed to export non-teak hardwood logs, lumber, and finished products. In the non teak hardwood sector, about 900,000 cubic meters of logs are cut for use as construction timber and railway sleepers. Approximately 197,000 cubic meters are used by downstream industries.

Local sales of teak logs for domestic consumption increased by one percent during FY 2002/2003 from the previous year to 157,000 cubic meters, whereas teak lumber sales decreased by 20 percent during FY 2002/2003 from the previous year of 10,000 cubic meters. Local sales of hardwood logs was constant at 1,332 cubic meters whereas local sales for other hard wood lumber increased by 22 percent during FY 2002/03 from the previous year of 272,000 cubic meters.

The private sector and joint venture companies can also compete in the monthly tender sales of teak and hardwood logs. For joint ventures the sale prices on logs are set at six month average tender prices.

Post believes that the utilization of teak logs and lumbers and other hardwood logs and lumber are much higher than official figures because the illicit trade of logs and lumber is a thriving, prosperous trade. Most of the domestic supply is provided from private saw mills and timber merchants who purchase illicit logs for milling, since the MTE has prohibited the local sale of teak lumber to private companies. The contraband products are mostly sold as lumber or value-added products such as furniture, window/door frames and doors. Most of the teak and padauk woods that are smuggled out through Thai/ Chinese border areas are flooring strips, plank boards scantlings or lumber blocks. According to FD data, seizures of illegally logged timber totaled 20,400 tons in FY 2002/03, an increase of 5 percent from the 19,500 tons seized during the previous fiscal year of 2001/02. Most of the illegal timber extraction occurred in Kachin and northern Shan States and also in Bago, Mandalay, Magwe and Sagaing divisions. It is rather difficult for FD to control the forests, especially in the border areas where access is difficult. Other factors contributing to illegal logging were an increase in the population and rising demand for some timber varieties especially teak and pyingado.

In an effort to counter illegal logging, FD conducts ad hoc or regular checks of extraction sites, vehicles used to transport timber, sawmills and finished products. Those involved in logging timber were required to apply for extraction permits and to mark all felled logs. The absence of either permits or the markings was used to determine if logs were illegally felled. Those caught with fraudulent documents or timber showing false markings were liable to a maximum penalty of three years' imprisonment and a Kyat 30,000 fine. Heavier penalties apply for the illegal extraction of teak

with penalties of seven years' in jail and a Kyat 50,000 fine. Seized timber is usually delivered to MTE.

Trade

Export Marketing and Milling

The Export Marketing and Milling Department of MTE processes the logs and either exports them in log form or further processes the logs into timber. There are 96 State owned saw mills and 459 small mills of small and medium capacities, 1,224 re-cutting mills and 487 domestic industrial privately owned mills. Domestic industrial mills are engaged in producing furniture and other semi-finished products. MTE has 6 plywood factories and 6 furniture and molding factories, which are export oriented. Out of 96 State owned saw mills, 8 are run for export products. The Myanmar wood industry is characterized by obsolete saw mills although some modern mills have been installed. As a result, the existing saw mills and ply wood factories can absorb only 34 percent of the AACs, leading to exports mostly in log form. Annual revenue from this undertaking is roughly about US\$ 200 million from the State sector and roughly about US\$ 50 million from the private sector including joint ventures. Forestry exports are comprised of logs (85%), rough sawn timber (12%) and value added products (3%). A total of 10 joint ventures and 100 percent investment companies are now involved in the timber industry.

Marketing

Burma's teak market still prevails as a seller's market and timber reigns as Burma's number one export earner, accounting for 25 percent of Burma's total exports. It is said that 75 percent of the teak available in the world market is produced out of Burma. Teak and hardwood logs are presently exported by monthly tender and also are sold by contracts on certain occasions. Sawn timber and downstream products are mainly sold by sales contracts. Teak of high quality grades is usually sold through monthly tenders, while third and fourth grades are sold through negotiations. In most sales, the foreign buyer usually makes a prepayment of 5 to 25 percent to the MTE. FY 2000/01 (March-April) tender sales amounted to 54,857 cubic meters (30,476 tons) of teak logs and the average price received for teak logs was US\$ 1,253 per ton (1.417 cubic meters) and the average price received for hard wood logs was US\$ 421 per metric ton. According to the official sales data from MTE for teak and hard wood logs in FY 2001/02 (March-April) there were 72,570 cubic meters (40,287 tons) of teak logs sold by tender sales, with 40 percent of these sales bought by Thailand. The average price received for teak logs was US \$ 1,387 per ton (US\$ 2,497 per cubic meter). In FY 2002/03 (March-Dec.), the average price received for teak logs was US\$1,481 per ton (US\$ 2,666 per cubic meter), an increase of 7 percent. It can be concluded that Thailand continues to be the major buyer of Burma's teak logs, taking about 40 percent of the teak log tender sales.

Exports

Regional economic conditions have a marked effect on Burma's timber prices. Though the situation may be said to have improved, the demand for timber has still not returned to the pre-1997 level. Exports of teak logs decreased by about one percent during FY 2002/03 from the previous year's total of 303,000 cubic meters. Exports of hardwood logs also decreased by more than 5 percent during FY 2002/03 from the previous year's total of 574,000 cubic meters.

Export of teak lumber decreased by more than 13 percent during FY 2002/03 from the previous year's total of 30,000 cubic meters. There was no export of other hardwood lumber from MTE and export data on the private sector volume was not available, though it was estimated by the trade that private sector exports were about 1,000 cubic meters of other hard wood lumber.

Export Trade Matrix			
Commodity	Teak Logs		
Time period	Jan-Dec	Units:	000 cum
Exports for:	2002		2003
U.S.	0	U.S.	0
Others		Others	
India	184		
Thailand	62		
Hong Kong	4		
Malaysia	0.5		
Pakistan	15		
Total for Others	265.5		0
Others not Listed	19		
Grand Total	284.5		0

Export Trade Matrix			
Country	Burma		
Commodity	Tropical Hardwood Logs		
Time period	Jan-Dec	Units:	000 cum
Exports for:	2002		2003
U.S.	0	U.S.	0
Others		Others	
India	305		

Thailand	38		
Hong Kong	3		
China	15		
Pakistan	143		
Total for Others	504		0
Others not Listed			
Grand Total	504		0

Exports of Plywood and Veneer

The volume of exports was not available but the amount of export value in CY 2001 was Kyat 92.2 million (US\$ 16 million*) and Kyat 100.90 million (US\$ 16.82 million) in CY 2002.

** Note: Exports are valued at the official exchange rate of Kyat 6 = US\$1.00.*

Tenders

Teak is sold in MTE's monthly tender and the sealed tender sales are on an FOB basis. Submittance of earnest money of US\$ 15,000 is necessary.

Average Export Prices

Export prices for teak varies widely from grade to grade and also from specification to specification. Depending upon the quality and specification, teak scantlings are sold at US\$ 1,000 to US\$ 2,800 per ton (or 1.4 cubic meters), while the higher priced decks fetch up to US\$ 3,000 to US\$ 5,200 per ton (or 1.8 cubic meters), while the sawing quality teak logs sell for US\$ 950 to US\$ 2,000 per ton.

Teak Log prices

Logs of considerably good quality are sold by competitive bidding in the monthly tender sales. In 2002, average sales prices for teak logs prices were sluggish in May and June, but gradually started to pick up through August. In September, teak logs prices were weak but continued to pick up slowly until December. The November teak log tender prices were the strongest of all the tenders held in 2002. Prices for SG-2-quality were strong throughout 2002. There was a demand for teak logs but the quality of the teak logs were not up to the standard required to make teak veneers since teak logs of high quality are becoming scarce. Out of the total sales of teak logs only one fourth of them met the requirement for teak veneers. Sales efforts were concentrated on Sawing Grade 4 logs. Demand for teak logs from the European countries has remained stable, while there was an increase in demand from Singapore, Hongkong

and Thailand. The Indian market was rather sluggish during the last three months of 2002. In FY2002/03 MTE was able to sell 166,891 cubic tons (236,485 cubic meters) of teak logs with a value worth of US\$ 134.349 million. It was able to get an average price of US\$1,489 per cubic ton, an increase of 7 percent as compared to FY 2001/02, when there was an average price of US\$ 1,387 per cubic ton.

Average Teak Log Tender Prices for nine months for 2002/03 (April -December) (US\$)

Quality	T-01/02-03 4/29/02 AVG.	T-02/02-03 5/27/02 AVG.	T-03/02-03 6/24/02 AVG.	T-04/02-03 7/29/02 AVG.	T-05/02-03 8/26/02 AVG.	T-06/02-03 9/23/02 AVG.	T-07/02-03 10/30/02 AVG.	T-08/02-03 11/25/02 AVG.	T-09/02-03 12/16/02 AVG.	(9) months AVG.
Teak logs sold (tons)	1,894	2,136	2,085	2,290	2,487	2,082	2,668	3,005	2,652	21,299
Teak logs avg. prices	\$1,514	\$1,463	\$1,497	\$1,511	\$1,505	\$1,397	\$1,479	\$1,511	\$1,468	\$1,481
4 th qlty	\$3,600	\$3,602	\$3,698	\$3,666	\$3,604	\$3,727	\$3,855	\$3,874		\$3,703
SG1.avg					\$2,688		\$2,841	\$2,957	\$2,988	\$2,689
SG2.avg	\$1,935	\$1,921	\$2,020	\$2,146	\$2,137	\$2,116	\$2,305	\$2,453	\$2,630	\$2,185
SG4.avg	\$1,443	\$1,384	\$1,443	\$1,435	\$1,405	\$1,289	\$1,374	\$1,411	\$1,371	\$1,395

Teak Lumber Prices

Teak lumber markets were weak in 2000/01. It was learned that the high demand for teak logs from European countries had weakened the demand for teak lumber. Due to the weak market situation, teak lumber was sold at a 25 percent discount and the special quality lumber at a 15 percent discount. This measure helped to increase the sales demand for teak lumber and sales began to pick up in 2001/2002. Demand for teak lumber in FY 2002/03 increased and MTE was able to sell second grade teak lumber with a 25 percent discount and a 15 percent discount for first and special quality teak lumber.

Hardwood Log Prices

Pyinkadoe log prices were steady for about four years with the price stable at US\$ 260 per cubic ton whereas the price fluctuated in Ka-nyin and In log markets. The prices received in FY 2002/03 were US\$ 205-225 per cubic ton. There was a decrease of 4 percent in In and Ka-nyin logs as compared to FY 2001/02 prices of US\$ 210-235 per cubic ton, because Burma faced competition in the market from other hard wood producing countries. Burma's hard

wood logs are mostly for the Indian market. MTE is focused on finding new markets, especially within China.

Hardwood Lumber

The export market for hard wood logs was stable but there were virtually no exports for lumber. Hardwood lumber was mostly supplied to the domestic market.

Teak logs - Veneer and Sawing Quality Logs

Currently, MTE uses grading rules for teak logs in two categories, veneering and sawing. Veneer logs are required to be straight and cylindrical with both of their ends butted (cut). Sawing logs are classified as they have been received from states and divisions of the country.

Veneer quality logs

There are five grades for veneer logs comprising Special, First, Second, Third and Fourth, with specified girth and length limits for each grades. Nevertheless, the logs must be straight and cylindrical and of good quality and that annual rings should be regular.

The girth and length specified for each grade are as follows:

Quality	Girth	Length
Special quality	6' and up	15' and up (with least defects)
First/Second/Third quality	4' 2" and up	8' to 24' (with less defects)
Fourth quality	4' 2" and up	8' and up (with acceptable defects)

Sawing quality logs

There are four grades in sawing quality logs namely: Sawing Quality Grade 1, Sawing Quality Grade 2, Sawing Quality Grade 3 and Sawing Quality Grade 4 with specified girth and length for each grades.

Girth and length specifications for all four grades are as follows:

Quality	Girth	Length
Sawing Quality Grade 1	5' and up	8' and up
Sawing Quality Grade 2	5' and up	8' and up
Sawing Quality Grade 3	3' to 3' 11"	8' and up
Sawing Quality Grade 4	4' and up	8' and up

Average prices (US\$) per ton of teak logs during 1996-97 to 2000-01

Quality	1996-97	1997-98	1998-99	1999-2000	2000-01
2 nd quality	5,200	-	-	-	4,659
3 rd quality	3,675	3,632	3,188	3,877	3,882
4 th quality	2,915	3,005	2,915	3,214	3,626
SG 1	2,026	2,015	2,235	2,407	2,511
SG 2	1,597	1,508	1,638	1,793	1,753
SG 3	1,032	987	882	779	862
SG 4	1,050	1,022	987	1,056	1,121
Assorted	738	795	680	705	829

SG= Sawing Quality Grade

OTHER TRADE TABLES

Monthly Exports of Teak in 2000

Month	Quantity ('000 Cubic Meters)	Value (Kyat in million, except for totals)
January	23.097	67.1
February	34.149	108.6
March	31.032	124.5
April	21.821	62.8
May	43.927	151.1
June	20.263	76.3
July	15.713	64.6
August	24.230	70.0
September	20.688	59.2
October	30.748	96.2
November	17.854	52.7
December	16.012	64.2
Total	299.534	US\$ 181.95 million

Source for this and following tables: Selected Monthly Economic Indicators.

Exports are valued at the official exchange rate of Kyat 6 = US\$1.00

Monthly Exports of Hardwood in 2000

Month	Quantity (‘000 Cubic Meters)	Value (Kyat in million)
January	32.024	17.9
February	48.886	27.7
March	74.109	65.7
April	36.133	26.3
May	52.003	34.8
June	35.708	25.2
July	32.449	16.7
August	38.542	23.8
September	26.214	11.9
October	44.635	18.9
November	36.983	18.6
December	37.267	23.6
Total	494.953	US\$ 34.12 million

Monthly Exports of Teak in 2001

Month	Quantity (‘000 Cubic Meters)	Value (Kyat in million)
January	22.246	76.4
February	23.388	87.0
March	41.801	108.3
April	20.404	95.1
May	21.113	101.8
June	27.064	132.6

July	19.412	97.9
August	38.684	185.9
September	23.097	120.9
October	20.688	113.2
November	22.672	113.5
December	22.388	121.8
Total	303.957	US\$ 181.95 million

Monthly Exports of Hardwood in 2001

Month	Quantity (‘000 Cubic Meters)	Value (Kyat in million)
January	9.919	8.9
February	20.121	14.5
March	24.655	37.2
April	34.149	37.0
May	30.040	32.4
June	30.465	36.1
July	20.971	24.8
August	45.202	49.2
September	58.947	63.4
October	30.182	33.1
November	53.137	55.5
December	15.728	24.3
Total	373.516	US\$ 34.12 million

Monthly Exports of Teak in 2002

Month	Quantity (‘000 Cubic Meters)	Value (Kyat in million)
January	19.41	107.30
February	21.54	108.30
March	27.63	123.40
April	21.82	133.60
May	22.39	110.20
June	20.12	94.10
July	20.12	91.00
August	24.80	116.80
September	28.62	121.70
October	30.61	144.70
November	16.44	78.20
December	30.04	134.20
Total	283.54	US\$ 227.25 million

Monthly Exports of Hardwood in 2002

Month	Quantity (‘000 Cubic Meters)	Value (Kyat in million)
January	10.72	14.70
February	30.18	36.50
March	44.92	50.10
April	30.89	37.70
May	58.95	71.30
June	45.49	51.10
July	47.61	50.50

August	51.86	54.80
September	50.73	54.60
October	31.74	36.60
November	22.39	26.50
December	78.47	70.14
Total	504	US\$ 92.42 million

Teak Log Average Price in Tender Sales During 2000 (US\$)

Particulars	January	February	March	April	May	June
Teak Logs avg. prices	1,225	1,244	1,268	1,242	1,228	1,355
3 rd Qlty. avg.	3,459	4,279	4,364	-4,256	-	3,880
4 th Qlty. avg.	3,409	3,409	3,643	3,557	3,553	3,594
SG 1 avg.	2,633	2,296	2,484	2,727	2,386	2,367
SG 2 avg.	1,832	1,759	1,761	1,713	1,717	1,706
SG 4 avg.	-	-	-	1,034	1,063	1,161

Particulars	July	August	September	October	November	December
Teak Logs avg. prices	1,334	1,304	1,172	1,146	1,168	1,143
3 rd Qlty. avg.	3,683					
4 th Qlty. avg.	3,444	3,513	3,801	3,476	3,787	3,654
SG 1 avg.	2,393				2,526	2,503
SG 2 avg.	1,690	1,758	1,839	1,777	1,814	1,768
SG 4 avg.	1,217	1,221	1,095	1,065	1,041	1,043

Source: Myanmar Forestry Journal

Average Teak Logs Prices for Tender Sales
in '2001-02 to '2002-2003 (US\$)

Tender No	T/2000-01 12 tenders avg.	T/2001-02 12 tenders avg.	T/2002-03 9 tenders avg
Teak logs sold(tons)	30,476	40,287	21,299
Teak logs avg.prices	1,253	1,387	1,481
(a) 2 nd qlty.avg.	4,659		
(b). 3rd qlty. avg.	3,882		
(c) 4th qlty. avg.	3,626	3,514	3,703
(d) SG 1.avg	2,511	2,395	2,869
(e) SG 2.avg	1,753	1,757	2,185
(f) SG 3.avg.			
(g) SG4.avg.	1,121	1,294	1,395

Source: Business Tank, Jan.2003

Teak Logs Tender Sales for 2001 by Area (US\$) Source: Myanmar Forestry Journal

Area	January		February		March		April	
	Ton	Value	Ton	Value	Ton	Value	Ton	Value
EUR/ UK/ USA	338	625,784	422	878,464	509	961,508	372	726,502
Hong Kong	274	286,837	349	369,216	35	38,874	208	268,814
India	367	445,051			247	294,960	206	240,969
Japan	101	191,633	34	92,469	52	109,176	11	44,678
Singa pore	445	546,246	681	823,791	521	711,840	734	969,332
Thai land	1,296	1,431,441	1,358	1,558,678	1,582	2,041,656	1,134	1,510,571

Burma	171	198,200	433	514,124	331	423,764	267	378,586
TOTAL	2,992	3,725,192	3,277	4,236,742	3,277	4,581,778	2,932	4,139,452

Area	May		June		July		August	
	Ton	Value	Ton	Value	Ton	Value	Ton	Value
EUR/ UK/ USA	356	659,878	100	253,935	212	415,001	284	483,660
Hong Kong	393	518,270	153	206,372	360	481,148	1007	1,250,207
India			353	519,079	216	317,893	433	593,908
Japan			20	52,708	10	39,187	11	39,087
Singapore	406	621,516	596	808,250	436	652,064	361	530,267
Thailand	1,099	2,484,966	937	1,278,155	1,944	2,549,065	986	1,314,820
Burma	430	585,058	342	470,618	300	410,988	519	696,438
Total	2,684	3,869,687	2,501	3,589,117	3,478	4,865,346	3,601	4,908,387

Area	September		October		November		December	
	Ton	Value	Ton	Value	Ton	Value	Ton	Value
EUR/ UK/ USA	228	448,937	291	591,362	314	549,742	312	544,163
Hong Kong	476	583,594	556	689,274	604	731,729	554	674,750
India	568	793,006	236	350,349	76	81,072	106	148,891
Japan					27	61,625	63	133,923
Singapore	741	1,088,435	406	657,399	819	1,102,131	342	540,355
Thailand	1,092	1,401,755	1,862	2,255,989	1,939	2,334,432	1,516	1,918,096
Burma	362	479,741	641	816,068	977	1,215,033	496	625,213

Total	3,467	4,795,468	3,992	5,360,441	4,756	6,075,764	3,389	4,585,391
-------	-------	-----------	-------	-----------	-------	-----------	-------	-----------

Teak Logs Tender Sales for 2002 by Area (tons)

Area	Jan to April	May to June	July to Sept.
EUR/UK/ USA	826.624	454.914	723.744
Hong Kong	1,029.882	710.258	1,433.216
India	847.866	824.904	556.008
Japan	109.106	11.908	131.642
Singapore	983.89	687.758	1,843.478
Thailand	3,201.366	1,074.904	2,847.784
Burma	1,406.404	805.09	790.144
Total	8,405.138	4,568.926	8,326.016

Trade matrix by months for 2002 Teak (cubic tons)

Destination	January	February	March	April	May	June
India	9,238	12,909	22,547	10,630	5,939	10,776
Thailand	6,657	3,319	3,757	6,602	2,224	9,409
Hongkong		481	3,089	-	431	-
Pakistan		1,216	645	197	84	6,974
Total	15,895	17,925	30,038	17,429	8,678	27,159

Destination	July	August	September	October	November	December
India	13,331	17,513	16,259	32,818	13,181	18,393
Thailand	2,007	10,779	5,453	-	-	11,436
Malaysia	-	-	-	85	-	452
Pakistan	2,875	789	340	757	436	196
Total	18,213	29,081	22,052	33,660	13,617	30,477

Trade matrix by months for 2002 Hardwood (cubic tons)

Destination	January	February	March	April	May	June
-------------	---------	----------	-------	-------	-----	------

India	8,000	22,834	30,852	10,630	20,658	10,776
Thailand	714	2,266	4,265	6,602	11,307	9,409
Hongkong	-	612	1,836	-	575	-
China	-	3,000	12,000	-	-	-
Pakistan	2,363	13,677	11,555	197	21,326	6,974
Total	41,554	42,389	60,508	17,429	53,866	27,159

Destination	July	August	September	October	November	December
India	50,028	45,111	31,184	44,175	12,411	17,580
Thailand	-	1,360	1,386	-	-	912
Pakistan	15,170	15,991	15,060	22,094	8,896	9,988
Total	65,198	62,462	47,630	66,269	21,307	28,480

Source: BIG business magazine

Exports of Forest Products (Private) during CY 2001

(000 US\$)

Commodity	Jan.	Feb.	March	April	May	June
Bamboo	56	15	27	24	14	20
Broom	-	12	49	5	42	9
Broom stick						
Cane	215	403	189	192	141	179
Cane Furniture						
Cutch	13	28	14	-	68	28
Handicraft	10	113	136	156	120	24
Hardwood Conversion	-	413	-	149	58	-
Hardwood Finished Goods	114	95	48	14	21	-
Hardwood Furniture	-	-	9	-	-	-
Hardwood Logs	-	-	322	-	-	78
Hardwood Plywood	327	732	608	35	2,751	179
Hardwood Scantling	95	-	178	-	18	147
Ohndon Bark	-	-	-	5	4	8
Teak Conversion	1,527	1,387	1,671	1,024	1,488	1,769
Teak Furniture	440	931	1,113	195	716	475
Teak logs			188		4	

Total	2,797	4,130	4,552	1,799	5,445	2,916
Commodity	July	August	Sept.	Oct.	Nov.	Dec.
Bamboo	272	5,819	6,750	58,335	42,608	179,248
Broom	28	5,415	36,143	53,400	5,560	47,765
Cane	205	255,884	152,446	260,111	96,816	414,003
Cutch	70		28,000	44,000	23,295	48,600
Handicraft	15	59,774	94,450	127,896	178,432	188,112
Hardwood Conversion	-	112,605	194,425	416,379	115,894	445,877
Hardwood Finished Goods	3			58,943	27,341	
Hardwood Logs	-		10,030	122,397		
Hardwood Plywood	1,691	188,105	998,342	3,471,643	17,213	1,993,321
Hardwood Scantling	219	21,772				
Ohndon Bark	2	8,920		8,920	2,650	4,950
Teak Conversion	2,155	1,820,220	2,688,660	3,757,016	2,766,210	3,032,412
Teak Furniture	459	325,715	256,912	2,939,150	465,566	613,548
Total	5,119	2,804,229	4,466,158	11,318,190	3,741,585	6,967,836

End of Report.